

### **REMARKS**

- Claims 29 - 37, 39 - 59, 61, 66 - 88, 90 and 91 will be the only pending claims under consideration upon entry of this amendment.
- Claims 29, 39, 41, 50 - 53, 61, 66, 87 and 88 have been amended herein. No new matter has been added.
- Claims 38, 60, 62 - 65, 89, 92 and 93 have been cancelled herein
- Claims 29, 50, 66, 87, and 88 are independent.

### **Restriction Requirement**

Applicants affirm the provisional election of claims 29 - 61 and 66 - 92, and cancel claims 62 - 65 without prejudice.

### **Rejection of claims 29 - 36, 38 - 40, 43 - 48, 66 - 74, 76 - 78, 82 - 85 and 88 - 93 under 35 U.S.C. §102(b)**

Claims 29 - 36, 38 - 40, 43 - 48, 66 - 74, 76 - 78, 82 - 85 and 88 - 93 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,510,093 filed July 25, 1994 and issued April 23, 1996 to Bartz (hereinafter "*Bartz*").

Claim 38, 92 and 93 have been cancelled.

Independent claim 29 has been amended to include the following features: "an upper thermal reaction chamber comprising: . . . iv) a fuel inlet for introduction of a fuel gas for mixing with the gaseous waste stream; [and] v) an oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream". The *Bartz* reference does not disclose or suggest an "oxidant inlet for introduction of an oxidant for

mixing with the gaseous waste stream". In fact, *Bartz* teaches that all of the oxidant is introduced into the thermal reactor through the porous sides of a foraminous burner. See, e.g., *Bartz*, col. 3 lines 37 -39. For at least this reason, Applicants submit that claim 29 is patentable over *Bartz*. Claims 30 - 36, 39 - 40 and 43 - 48 each depend ultimately from patentable base claim 29, and Applicants submit that these claims are patentable for at least this reason.

Similarly to claim 29, independent claim 66 has been amended to include the features "at least one fuel inlet for introduction of a fuel gas for mixing with the gaseous waste stream; [and] at least one oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream." Applicants submit that claim 66 is therefore patentable over *Bartz* for at least the same reason that claim 29 is patentable. Claims 65 - 74, 76 - 78 and 82 - 85 each depend ultimately from patentable base claim 66, and Applicants submit that these claims are patentable for at least this reason.

Independent claim 88 has been amended to include the features of cancelled claim 89: wherein the porous ceramic wall includes pores shaped so as to provide passage of fluid into the central chamber defined by the porous ceramic wall while reducing backflow of any fluid or reaction products from the central chamber. *Bartz* does not disclose or suggest pores which are intentionally shaped in any particular shape, let alone a shape which reduces backflow of any fluid or reaction products from the central chamber. Applicants submit that claim 88 is patentable over *Bartz* for at least this reason. Claims 90 and 91 each depend from base claim 88 and Applicants submit that these claims are patentable over *Bartz* for at least this reason.

**Rejection of claims 41, 42, 49, 75, and 79 - 81 under 35 U.S.C.**

**§103(a)**

Claims 41, 42, 49, 75, and 79 - 81 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Bartz*. Claims 41, 42 and 49 depend ultimately from amended base claim 29 which, Applicants have argued above, is patentable over *Bartz*: *Bartz* does not disclose or suggest "an oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream". Applicants submit that claims 41, 42 and 49 are patentable for at least this reason. Claims 75 and 79 - 81 each depend ultimately from amended base claim 66 which, Applicants have argued above, is patentable over *Bartz* for the same reasons that amended claim 29 is patentable. Applicants submit that claims 75 and 79 - 81 are patentable over *Bartz* for at least this reason.

**Rejection of claims 37, 50 - 61, 86 and 87 under 35 U.S.C.**

**§103(a)**

Claims 37, 50 - 61, 86 and 87 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Bartz* in view of U.S. Pat. No. 6,187,080 filed August 9, 1999 and issued February 13, 2001 to Ping-Chung (hereinafter "*Ping-Chung*").

Claim 60 has been cancelled.

Claim 37 depends directly from amended base claim 29. Base claim 29 recites "an upper thermal reaction chamber comprising: . . . iv) a fuel inlet for introduction of a fuel gas for mixing with the gaseous waste stream; [and] v) an oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream". Neither the *Bartz* reference, as discussed above, or the *Ping-Chung* reference discloses or suggests "an upper thermal reaction chamber comprising: . . . an oxidant inlet for

introduction of an oxidant for mixing with the gaseous waste stream". Applicants submit that claim 37 is therefore patentable over *Bartz* in view of *Ping-Chung*.

Independent Claim 50 has been amended to recite: "an upper thermal reaction chamber comprising: . . . vi) at least one fuel inlet for introduction of a fuel gas for mixing with the gaseous waste stream; [and] vii) at least one oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream. Again, neither *Bartz* nor *Ping-Chung* discloses or suggests "an upper thermal reaction chamber comprising: . . . an oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream". Applicants submit that independent claim 50 is therefore patentable over *Bartz* in view of *Ping-Chung*. Claims 51 - 59 and 60 each depend ultimately from claim 50, and Applicants submit that these claims are patentable over *Bartz* in view of *Ping-Chung* for at least this reason.

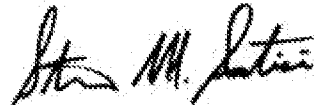
Claim 86 depends from claim 66 and as such recites the same features: "a thermal reaction chamber having . . . at least one fuel inlet for introduction of a fuel gas for mixing with the gaseous waste stream; [and] at least one oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream." Applicants submit that because neither reference discloses or suggests "a thermal reaction chamber having . . . at least one oxidant inlet for introduction of an oxidant for mixing with the gaseous waste stream", claim 86 is patentable over *Bartz* in view of *Ping-Chung*.

CONCLUSION

Applicants believe the claims are now in condition for allowance, and respectfully request reconsideration and allowance of the same.

A separate Request for Extension of Time is enclosed herewith, with authorization to charge the requisite extension fee to Deposit Account No. 04-1696. Applicants do not believe any other Request for Extension of Time is required but if it is, please accept this paragraph as a Request for Extension of Time and authorization to charge the requisite extension fee to Deposit Account No. 04-1696. Applicants do not believe any additional fees are due regarding this Amendment. However, if any additional fees are required, please charge Deposit Account No. 04-1696.

Respectfully Submitted,



Dated: November 13, 2007  
Tarrytown, New York

Steven M. Santisi  
Registration No. 40,157  
Dugan & Dugan, PC  
Attorneys for Applicants  
(914) 332-9081